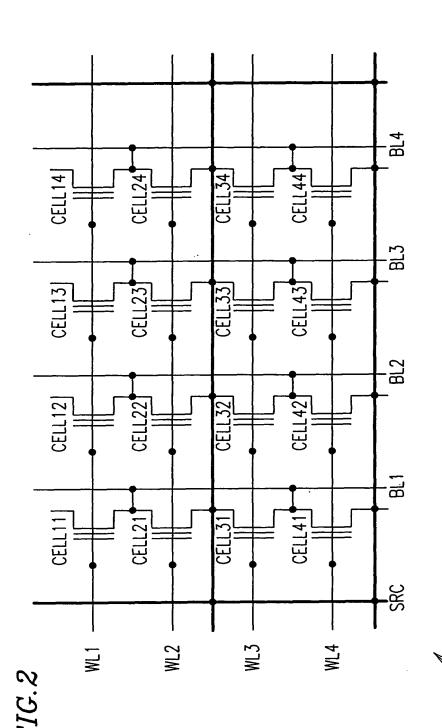


FIG. 1

Sheet 2 of 18

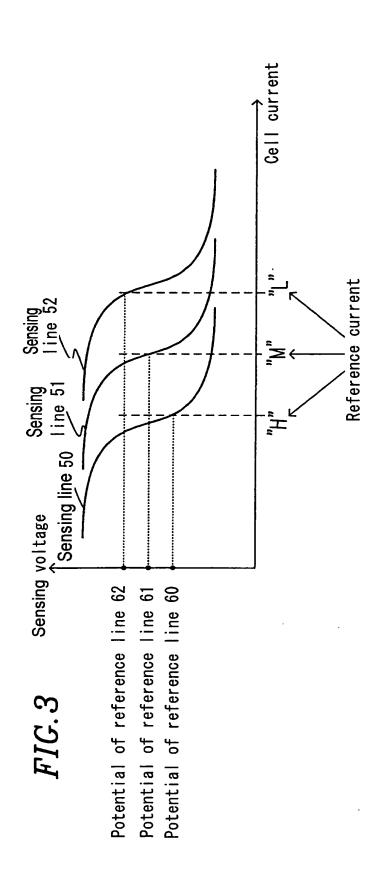
ONDOOTOR WEMORE DEVICE



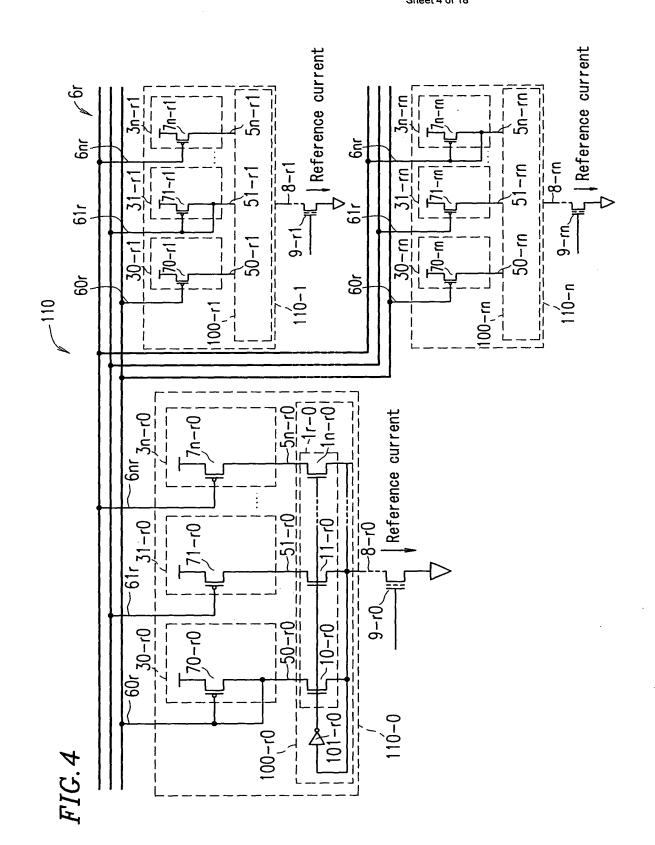
50/

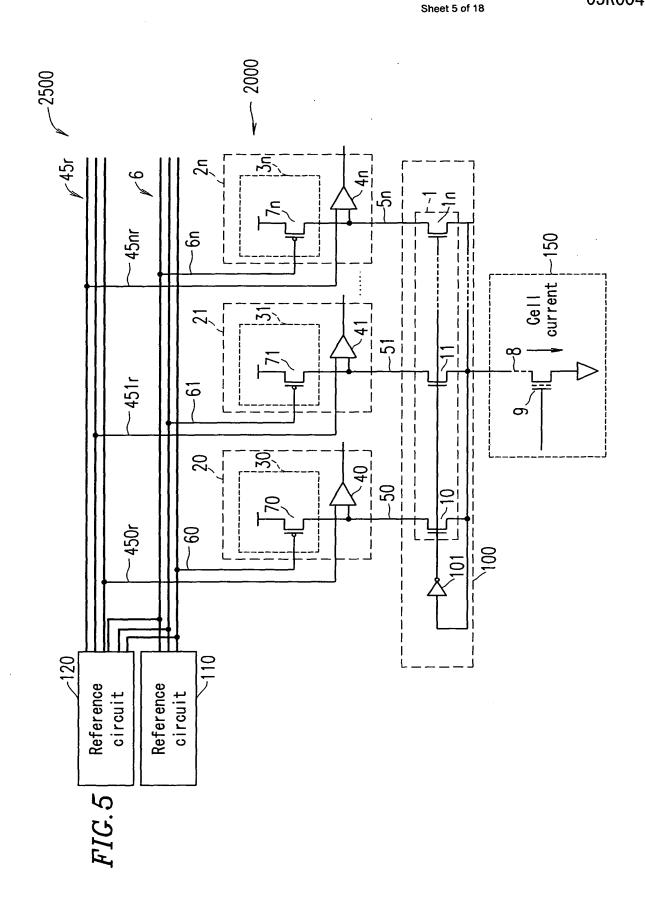
Sheet 3 of 18

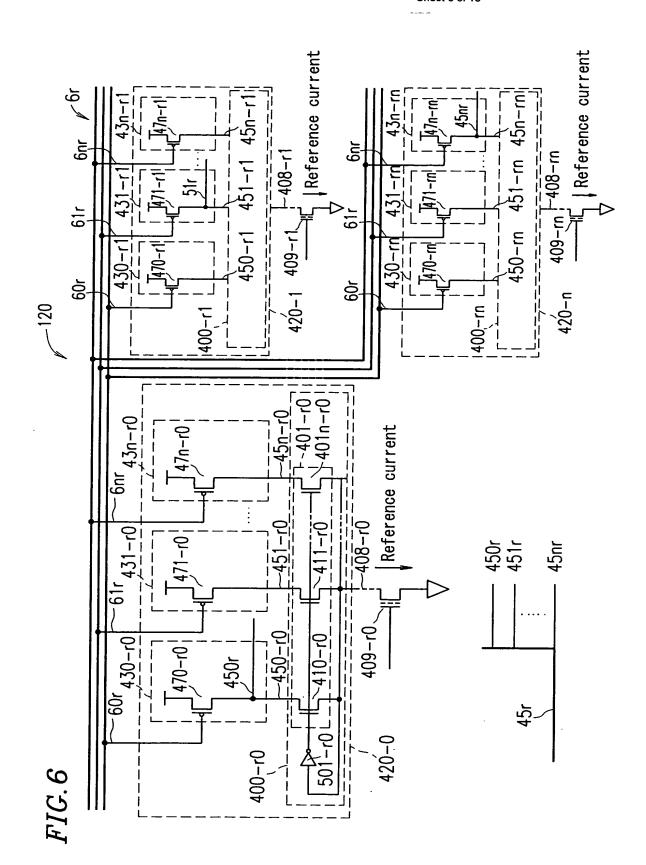




Sheet 4 of 18

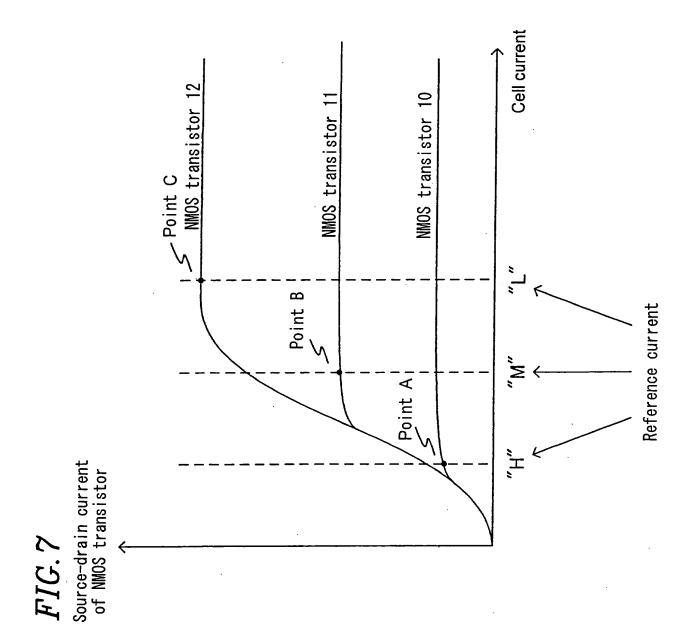






Sheet 7 of 18

App No.: Not Yet Assigned Inventor: Yasumichi MORI, et al Docket No.: 299002056900 Title: READING CIRCUIT, REFERENCE CIRCUIT, AND SEMICONDUCTOR MEMORY DEVICE



Sheet 8 of 18

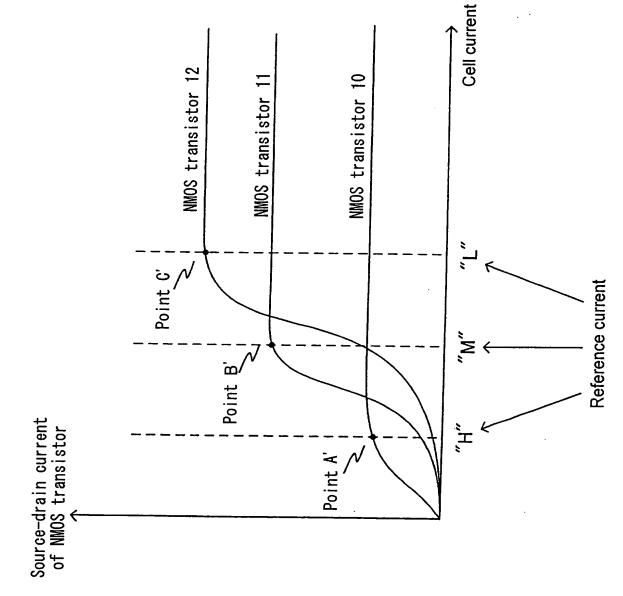
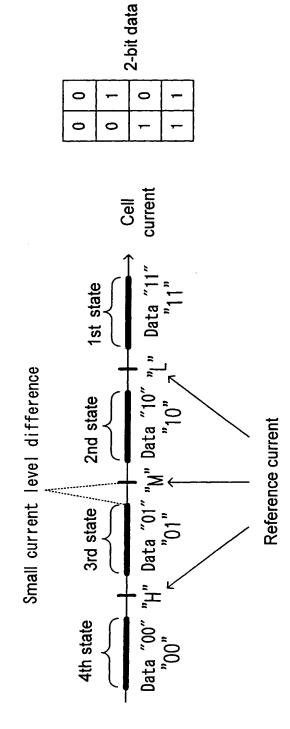
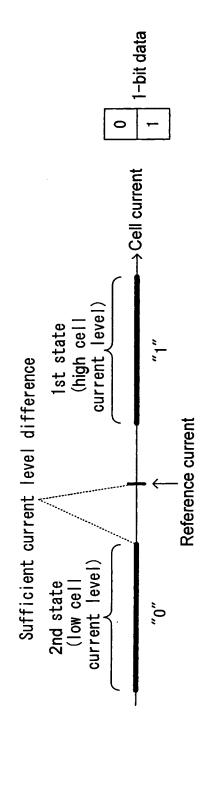


FIG. 9A

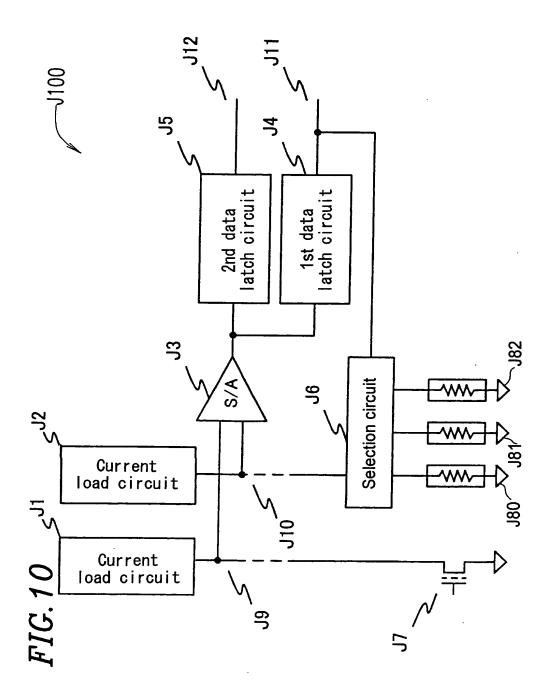


Sheet 10 of 18

03R00455

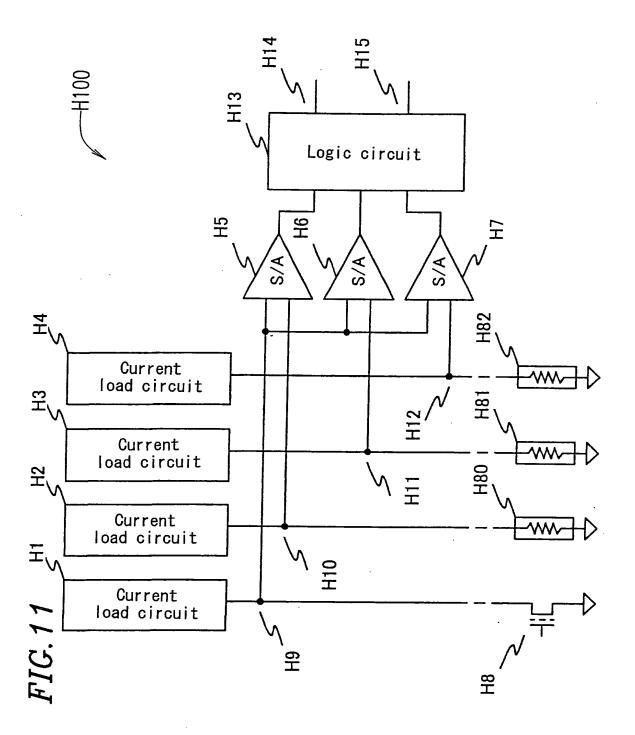


Sheet 11 of 18

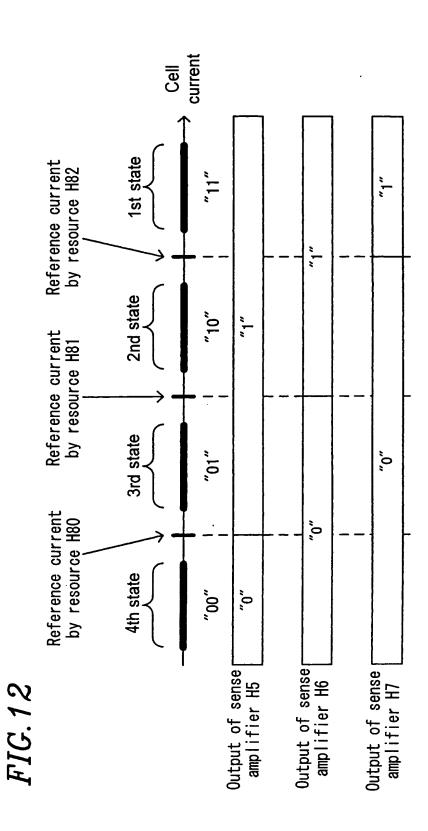


Sheet 12 of 18

03R00455



03R00455

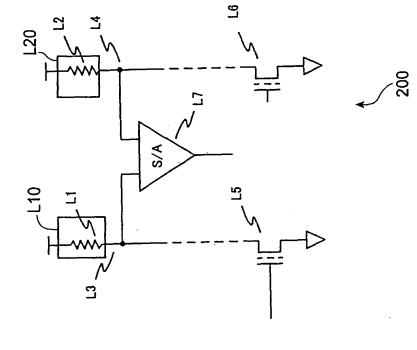


03R00455

Sheet 14 of 18

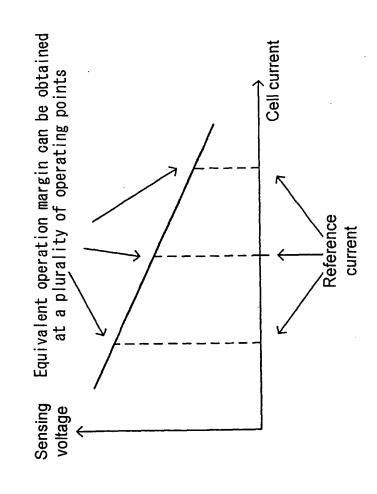
Output	H15	0	-	0	-
	H14	0	0	-	-
	H7 output	0	0	0	1
	H6 output	0	0	<del>, ,</del>	1
	H5 output	0	-	-	-

03R00455 Sheet 15 of 18



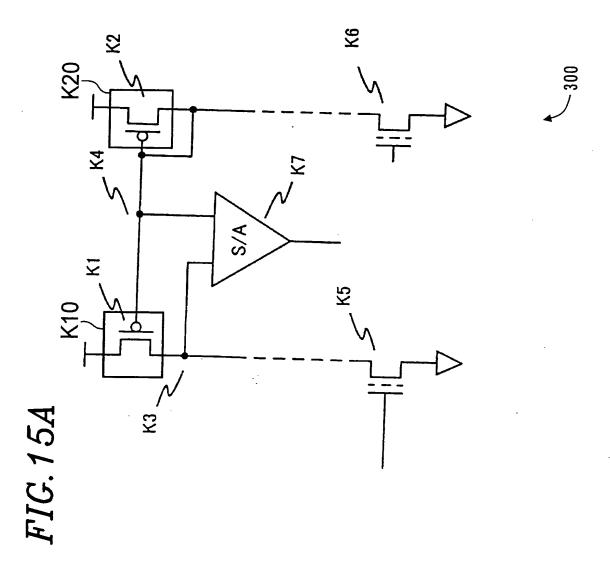
Sheet 16 of 18

03R00455



Sheet 17 of 18

03R00455



K—Region where the sensing voltage conversion efficiency Cell current is especially high Reference current FIG. 15B Sensing voltage